

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference EAFL PA49PCT	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/EP2004/005712	International filing date (day/month/year) 27.05.2004	Priority date (day/month/year) 04.06.2003
International Patent Classification (IPC) or national classification and IPC		
Applicant EATON FLUID POWER GMBH		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/005712

Box No. I

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-16 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1-12 _____ received by this Authority on 21.12.2004 with letter
- nos.* _____ received by this Authority on of 20.12.2004
- ☒ the drawings:
- sheets 1/2-2/2 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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International application No.

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	<u>1-12</u>	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-12</u>	NO
Industrial applicability (IA)	Claims	<u>1-12</u>	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
1. Reference is made to the following documents:			
D1: FR-A-2 397 578 (BAUDET ALAIN) 9 February 1979 (1979-02-09)			
D2: GB 102 688 A (JENKINS FRANCIS THOMAS) 21 December 1916 (1916-12-21)			
D3: DE 196 42 837 C (DAIMLER BENZ AG) 29 January 1998 (1998-01-29)			
D4: US-A-3 472 278 (ARFELT SOREN CHRISTIAN SCHOUBY) 14 October 1969 (1969-10-14)			
2. INDEPENDENT CLAIM 1			
2.1 The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claim 1 does not involve an inventive step (PCT Article 33(3)).			
2.1.1 Document D1 is considered the prior art closest to the subject matter of claim 1 and discloses (the references between parentheses refer to that document):			

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slide valve for hydraulic systems,

with a valve housing, comprising a through channel (3, 4) with a slide bore (7, 11) extending transversally through the channel,

with a slide (1),

with a pressure spring (8),

wherein the slide (1)

- (has??) a head (right-hand part of the slide (1)), which is mounted so as be longitudinally displaceable in the slide bore (7, 11) and which is impinged upon by the fluid pressure prevalent in the through channel (3, 4), and
- has a blocking section (left-hand part of the slide (1)), which is connected to the head and can thus be moved therewith between a blocking position and a release position.

2.1.2 The subject matter of claim 1 thus differs from the known slide valve in that

the pressure spring holds the slide in the open position and

the slide is moved by the fluid pressure in to the blocking position, in which it remains until the pressure again falls below the switching threshold.

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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2.1.3 The present invention can therefore be considered to address the problem of ensuring that the valve blocks the passage when a set pressure level is exceeded.

The solution proposed in claim 1 of the present application cannot be considered inventive (PCT Article 33(3)) for the following reasons:

2.1.4 The stated features have already been used for the same purpose in a similar slide valve; see document D2, in particular page 2, lines 25 - 44. If a person skilled in the art wished to achieve the same aim in a slide valve as per document D1, he could easily apply the features to like effect to the subject matter of D1. In this way he would arrive at a slide valve as per claim 1 without thereby being inventive.

3. DEPENDENT CLAIMS 2-12:

3.1 Re. claims 2-11:

Dependent claims 2-11 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for novelty and inventive step; see the relevant passages of text from documents D1, D2 and D4 that are listed in the search report.

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3.2	Re. claim 12:
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Claim 12 concerns a hydraulic system with a hydraulic pump, with a load and at least two mutually parallel branches and with a slide valve as per claim 1.

The hydraulic system is known from D3.

It is not inventive to use a known slide valve in a known hydraulic system (PCT Article 33(3)).